Notice of Allowability	Application No.	Applicant(s)	
	09/933,035	BRANDEN, SCOTT	
	Examiner	Art Unit	
	Jay P. Patel	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *11/7/2005*.

2. ☒ The allowed claim(s) is/are *1-3, 6-17, 19-24 and 27-36 (now renumbered 1-28)*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-3, 6-17, 19-24 and 27-36 (now renumbered 1-28) allowed.

2. The following is an examiner's statement of reasons for allowance in response to the amendment filed November 7th, 2005:

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

In regards to claim 1, the cited prior art either individually or in combination, fails to disclose, **forwarding tone-on signals across said network in response to said validation, wherein the step of processing said communication signal to invalidate said tones comprises shifting frequency of said tone and/or adding tone to said communication signal at a discrete frequency**. It is noted that the closest prior at Arnaud et al. (U.S. Patent 6650662 B1) discloses a tone detection system (column 5 lines 25-35 and Figure 2, DTMF detector 203). An incoming signal is sent in parallel to a DTMF detector and a filter for removing DTMF content according to the pre-detected DTMF frequencies. Arnaud also discloses that before validating the DTMF signals, the output of the DTMF detector is filtered to remove the value of the second group frequency (column 5 lines 36-41 and figure 2, filter 201).). One of the functions of the DTMF detector is to validate the DTMF signals (column 5 lines 25-27

and figure 2, DTMF detector 203); and furthermore, The DTMF detector provides the transmit interface 205 with information relating the type of DTMF signal; one of which is a tone-on signal (column 9 lines 45-50 and figure 2 DTMF detector 203).

In regards to claim 11, the cited prior art either individually or in combination, fails to disclose, **an encoder for encoding said processed signal in accordance with an applications protocol, wherein said tone invalidation logic comprises a signal generator for adding an additional tone to said incoming signal at a discrete frequency**. It is noted that the closest prior art Arnaud et al. (U.S. Patent 6650662 B1) discloses a tone detector for detecting DTMF signals and validating the DTMF signals (column 5 lines 25-28 and figure 2, DTMF detector 203). Arnaud also discloses a filter to remove a frequency among the pre-detected DTMF frequencies to avoid any double DTMF detection (column 5 lines 228-30 and figure 2, filter 201). Therefore any double DTMF tone will be invalidated in the filtering process. Arnaud also discloses a compression system and a transmit interface for compressing and assembling voice and pure DTMF packets for transmission to the destination node (column 5 lines 30-35 and lines 47-52 and figure 2 compressor 204 and interface 205).

In regards to claim 19, the cited prior art either individually or in combination fails to disclose **a voice encoder and said tone invalidation logic comprising a signal generator for adding an additional tone to said incoming signal at a discrete frequency**. It is noted that the closest prior art Arnaud et al. (U.S. Patent 6650662 B1) discloses a telephone set linked to a private branch exchange that is connected to a source node (column 1, lines 3-8 and figure 1 telephone set 100, PBX 101 and source

node 102). The source node contains the DTMF detector 203, compression system 204 and the interface unit 205 disclosed in regards to the claims above (column 5, lines 24-36 and figure 2).

In regards to claim 27, the cited prior art either individually or in combination fails to disclose **means for invalidating said tones comprising a signal generator for adding an additional tone to said incoming signal at a discrete frequency and/or means for shifting frequency of said tone**. It is noted that the closest prior art Arnaud et al. (U.S. Patent 6650662 B1) discloses a tone detector for detecting DTMF signals and validating the DTMF signals (column 5 lines 25-28 and figure 2, DTMF detector 203). Arnaud also discloses a filter to remove a frequency among the pre-detected DTMF frequencies to avoid any double DTMF detection (column 5 lines 228-30 and figure 2, filter 201). Therefore any double DTMF tone will be invalidated in the filtering process. Arnaud also discloses a compression system and a transmit interface for compressing and assembling voice and pure DTMF packets for transmission to the destination node (column 5 lines 30-35 and lines 47-52 and figure 2 compressor 204 and interface 205).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay P. Patel whose telephone number is (571) 272-3086. The examiner can normally be reached on M-F 9:00 am - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPP 11/18/05

Jay P. Patel
Examiner
Art Unit 2666

Seema S. Rao 11/28/05

SEEMA S. RAO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600